

Claims

1. A mounting apparatus for an electrode, the mounting apparatus comprising a body with means for mounting
5 an electrode, whereby in use the body is partly about the electrode and the electrode projects from the body, the apparatus further comprising at least one external protrusion on the body.
- 10 2. A mounting apparatus for an electrode according to claim 1, in which the body is generally cylindrical and the projection is generally radial relative thereto.
- 15 3. A mounting apparatus for an electrode according to claim 1 or claim 2, in which the body has a relatively thinner cylindrical elongate section.
- 20 4. A mounting apparatus for an electrode according to claim 3, in which the relatively thinner cylindrical elongate section is towards the distal end of the body.
- 25 5. A mounting apparatus for an electrode according to any preceding claim, in which the at least one protrusion is annular (ie 360°) about the body.
- 30 6. A mounting apparatus for an electrode according to any preceding claim, in which the body and the at least one protrusion are a one piece structure.
7. A mounting apparatus for an electrode according to any preceding claim, in which the body at least

partly comprises a high electrical resistance material.

- 5 8. A mounting apparatus for an electrode according to claim 7, in which that part of the body to be in contact with the electrode comprises a high electrical resistance material.
- 10 9. A mounting apparatus for an electrode according to any preceding claim, in which the body is substantially circular cylindrical.
- 15 10. A mounting apparatus for an electrode according to any one of claims 1 to 8, in which the non-protruding regions are substantially cylindrical.
- 20 11. A mounting apparatus for an electrode according to any preceding claim, in which the at least one protrusion is generally conical externally.
12. A mounting apparatus for an electrode according to claim 11, in which the at least one protrusion is at least partly hollow.
- 25 13. A mounting apparatus for an electrode according to claim 12, in which the at least one protrusion is rebated.
- 30 14. A mounting apparatus for an electrode according to any one of claims 11 to 13, in which the protrusions are tapered.

15. A mounting apparatus for an electrode according to any preceding claim, in which all of the body comprises substantially the same material.
- 5 16. A mounting apparatus for an electrode according to any preceding claim, in which there are a plurality of protrusions spaced along the body.
- 10 17. A mounting apparatus for an electrode according to claim 16, in which the protrusions are substantially similar.
- 15 18. A mounting apparatus for an electrode according to claim 16 or claim 17, in which the protrusions are equally spaced along the body.
- 20 19. A mounting apparatus for an electrode according to any preceding claim, in which the body includes a hole therethrough for mounting an electrode therein.
20. A mounting apparatus for an electrode according to claim 19, in which the hole is longitudinal.
- 25 21. An electrode mounting apparatus comprising a mounting apparatus according to any one of claims 1 to 20, the apparatus further comprising an electrode about which the body is located.
- 30 22. An electrode mounting apparatus according to claim 21, in which the electrode is mounted from one end only.

23. An electrode mounting apparatus according to claim 21 or claim 22, in which the electrode projects from an end of the body for forming a corona discharge.
- 5 24. A pollutant removal system for at least partly removing at least one pollutant from a gas flow stream, the system comprising an electrode mounting apparatus according to any preceding claim.
- 10 25. A pollutant removal system according to claim 24, in which the system comprises means for diverting pollutants to a pollutant remover.
- 15 26. A pollutant removal system according to claim 24 or claim 25, in which the system comprising means for charging particulates in the gas stream and a tube through which the gas stream at least partly flows, whereby the tube is at least partly porous to the gas stream and the apparatus additionally comprises means for collecting at least one pollutant.
- 20 27. A pollutant removal system according to claim 27, in which the tube is at least partly about the charging means.
- 25 28. A pollutant removal system according to claim 27, in which the charging means comprises an electrode.
- 30 29. A pollutant removal system according to any one of claims 24 to 28, in which the tube is perforated.

30. A pollutant removal system according to claim 29, in which the tube comprises a plurality of holes therethrough.
- 5 31. A pollutant removal system according to claim 30, in which the holes are evenly spaced.
32. A pollutant removal system according to claim 30 or claim 31, in which the holes are evenly sized.
- 10 33. A pollutant removal system according to any one of claims 29 to 32, in which the perforated region of the tube is substantially annular.
- 15 34. A pollutant removal system according to any one of claims 29 to 33, in which the perforated region of the tube extends for a substantial length thereof.
- 20 35. A pollutant removal system according to any one of claims 24 to 29, in which the tube comprises at least one slot therethrough.
36. A pollutant removal system according to claim 35, in which a plurality of slots is provided.
- 25 37. A pollutant removal system according to claim 35 or claim 36, in which the slots are substantially evenly distributed about the tube.
- 30 38. A pollutant removal system according to any one of claims 35 to 37, in which the at least one slot runs longitudinally along the tube.

39. A pollutant removal system according to claim 26,
in which the tube is circular in cross-section.
40. A pollutant removal system according to claim 26,
5 in which the tube comprises an inlet and an outlet.
41. A pollutant removal system according to claim 40,
in which the cross-sectional area of the tube
decreases along its length from the input to the
10 output thereof.
42. A pollutant removal system according to any one of
claims 24 to 41, in which the electrode is mounted
at one end thereof only.
- 15 43. A pollutant removal system according to any one of
claims 24 to 42, in which there is a first gas flow
path from an apparatus gas inlet to an apparatus
gas outlet and a second gas flow path from the
20 apparatus gas inlet to the apparatus gas outlet.
44. A pollutant removal system according to claim 43,
in which the first and second gas flow paths are in
common for a part thereof.
- 25 45. A pollutant removal system according to claim 43 or
claim 44, in which a filter is located in the
second gas flow path.
- 30 46. A pollutant removal system according to any one of
claims 43 to 45, in which the tube is located in
the first and second gas flow paths.

47. A pollutant removal system according to any one of claims 43 to 46, in which the arrangement comprises a gas flow tube for the second flow path, which gas flow tube comprises a slot for the first gas flow path to join the second gas flow path.
48. A pollutant removal system according to any one of claims 43 to 47, in which the first gas flow path splits from the second gas flow path at a separator for diverting pollutant to the pollutant removing means.
49. A pollutant removal system according to claim 48, in which the separator is generally conically shaped with an opening for one of the gas flow paths therethrough.
50. A pollutant removal system according to any one of claims 24-49, in which the tube is at least partly coated with a resistant layer.